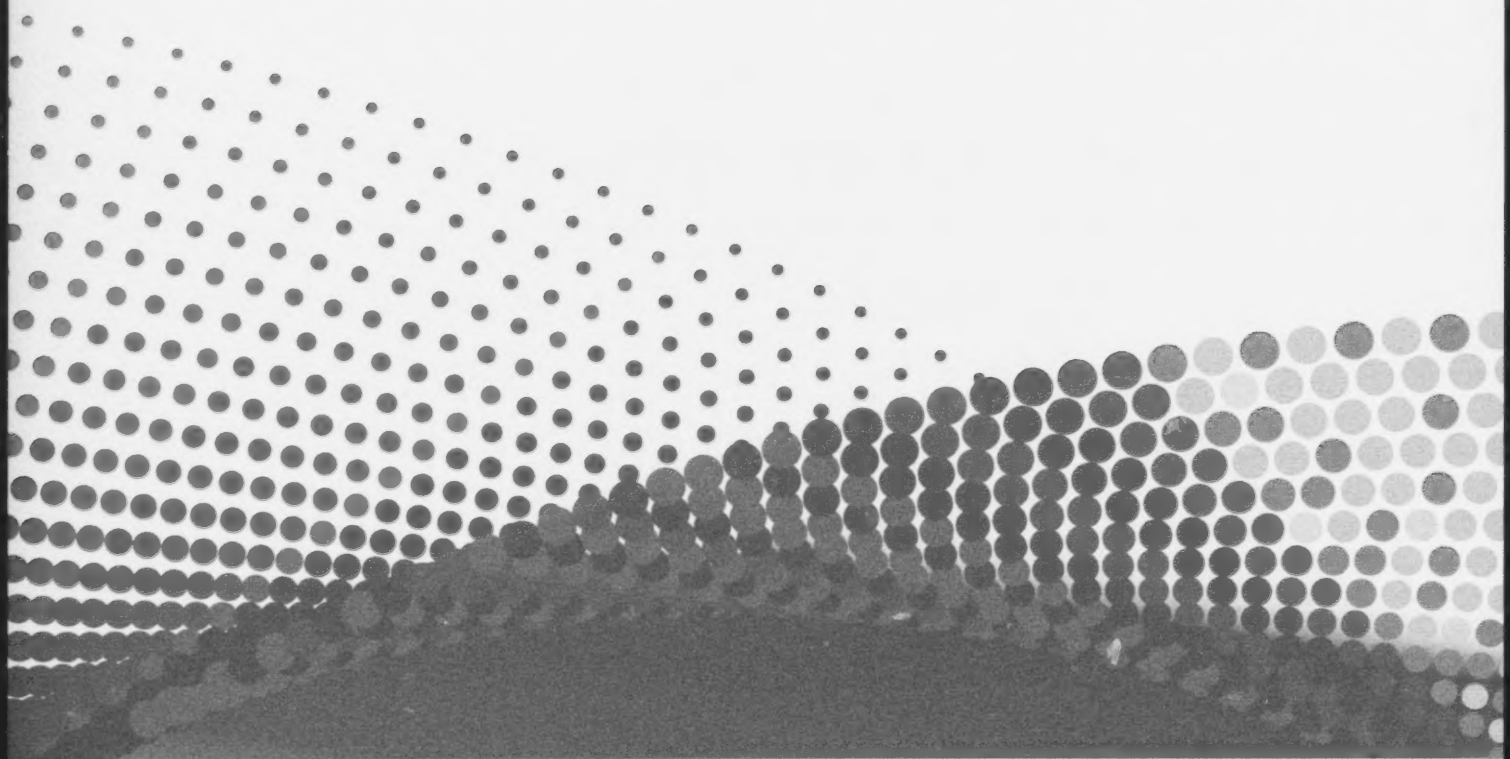
Financial Consumer Agency of Canada
Agence de la consommation en matière financière du Canada

PROGRESS REPORT: CANADA'S NATIONAL RESEARCH PLAN ON FINANCIAL LITERACY 2016-2018

April 2018



Canada

This report describes the progress made in advancing financial literacy research in Canada since the release of the National Research Plan on Financial Literacy 2016-2018.

About the Research Sub-Committee

The Research Sub-Committee on Financial Literacy advises Canada's Financial Literacy Leader and the National Steering Committee on Financial Literacy on research-related matters and works together with the research community to coordinate initiatives, focus and leverage efforts, and avoid duplication.

Based on collaboration, the sub-committee's role includes generating empirical evidence that will contribute to the successful implementation of the *National Strategy for Financial Literacy—Count me in, Canada.*

The key deliverables of the inaugural Research Sub-Committee, established in 2016, over its two-year mandate (2016-2018) were:

- to identify research priorities; and,
- to propose a National Research Plan on Financial Literacy that addresses research areas and specific initiatives that should be carried out in priority.

Members of the Research Sub-Committee

The Research Sub-Committee was made up of representatives from the public, private and non-profit sector, with a diverse and complementary set of skills and expertise.

Bruno Lévesque, Chair, Financial Consumer Agency of Canada
Cairine Wilson, Co-Chair (retired), Chartered Professional Accountants Canada
Simon Brascoupé, AFOA Canada
Derek Dedman, Financial Planning Foundation
Karen Duncan, University of Manitoba
Jan Dymond, Investment Funds Institute of Canada
Noah Gitterman, Consumer Protection Ontario
Jodi Letkiewicz, York University
Pierre-Carl Michaud, HEC Montréal
Jennifer Robson, Carleton University
David Rothwell, Oregon State University
Shishir Shahnawaz, Canada Mortgage and Housing Corporation
Dilip Soman, University of Toronto
Brenda Spotton Visano, York University
Evren Damar, Bank of Canada

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Thank you to the National Steering Committee on Financial Literacy's Research Sub-Committee

Canada's first National Research Plan on Financial Literacy is paving the way to greater financial well-being for Canadians.

The *National Strategy for Financial Literacy—Count me in, Canada* was created to mobilize and engage public, private and non-profit sectors to strengthen the financial literacy of Canadians and empower them to manage money and debt wisely; plan and save for the future; and prevent and protect themselves against fraud and financial abuse.

To successfully deliver on this ambitious effort, we knew that we needed to bring together a group of bright and influential thought leaders working in this field. So, in 2016, the National Steering Committee for Financial Literacy established a Research Sub-Committee to provide expert advice based on robust empirical evidence. The following pages shine a light on the foundational and exceptional work of the Committee, which has helped to inform implementation of the National Strategy over the last two years.

On behalf of the National Steering Committee and my colleagues at the Financial Consumer Agency of Canada (FCAC), I would like to express my sincere gratitude to each and every member of the Research Sub-Committee. Collectively, you have come together to set the direction of the financial literacy research agenda for stakeholders across the country. At the same time, individually, you have generated evidence that feeds directly into the implementation of the *National Strategy for Financial Literacy*.

Your dedication and expertise is paving the way to greater financial well-being for Canadians.

Thank you for your hard work and tremendous leadership.

Sincerely,

Jane Rooney
Canada's Financial Literacy Leader

A message from the Committee Chair

I am so honoured to publicly share the work of the National Steering Committee on Financial Literacy's Research Sub-Committee. I have had the privilege to serve as the Chair of this committee and, as such, I have seen firsthand the incredible passion that the members bring to their work. It has truly been a pleasure to work with such a motivated and inspiring group of professionals who are dedicated to improving the financial well-being of Canadians through empirical evidence.

Canada's National Research Plan on Financial Literacy 2016-2018 was developed by the Research Sub-Committee, leveraging recent key findings, to identify research gaps, opportunities and ongoing research initiatives. The Plan serves as a clear road map for the broad network of researchers in the field of financial literacy who are developing new and innovative research projects. These projects will further our collective base of evidence aimed at helping consumers with the following priorities:

- paying down household debt;
- budgeting;
- building savings; and,
- understanding financial products and services in the increasingly complex marketplace.

Additionally, the research plan has helped to raise awareness, both in Canada and internationally, of the financial literacy research underway across the country.

The purpose of this report is to share what has been learned—to help inform the work of practitioners as well as the work of researchers in fields related to financial literacy. In the following pages, we report major themes and emerging trends from studies contributing to the delivery of the *National Strategy for Financial Literacy*. In addition, we highlight future research opportunities and the implications for practitioners.

On behalf of the members of the Research Sub-Committee, I hope that the findings in this progress report will be useful and inspiring.

Sincerely,

Bruno Lévesque
Director, Education, Research and Policy
Financial Consumer Agency of Canada

1.0 Smarter financial literacy

Understanding of financial concepts is important, but not sufficient to achieving all desirable financial outcomes. Having confidence in one's ability to apply that knowledge when making decisions under real-life conditions is also crucial.

A growing body of evidence indicates that financial literacy—defined as the knowledge, skills and confidence a person needs to make informed financial decisions—plays an important role in managing money, as well as planning and saving for the future. An important component of the National Research Plan on Financial Literacy 2016-2018 (hereafter referred to as the "National Research Plan") is related to making financial literacy interventions **smarter**. By that we mean, evolving financial literacy interventions through empirical evidence about:

- the factors that contribute to financial decision-making,
- the best timing to provide interventions, and
- the best sources and mechanisms for delivering interventions.

The National Research Plan emphasized the importance of further exploring the recent trend in the literature of investigating the role of psychosocial factors in financial decision-making. For instance, evidence demonstrates that financial decisions are influenced by a wide-range of related factors such as:

- financial confidence (and its cognitive cousin self-efficacy)
- executive functioning (e.g., self-control, working memory, problem solving)
- attitudes towards money (e.g., time-orientation)
- behavioural habits

What we are learning is that, on top of the knowledge it takes to make a decision, many psychosocial factors relate to the degree to which consumers persist through a problem to find the right solution for them. Some factors also relate to the required abilities to plan out financial behaviours and then to stick to that plan.

1.1 Studies using the Canadian Financial Capability Survey to explore financial literacy influencers

The studies highlighted in this section use data from the Canadian Financial Capability Survey (CFCS) to extend the evidence related to psychosocial factors towards smarter financial literacy interventions.

About the Canadian Financial Capability Survey (CFCS)

The CFCS was designed to provide a portrait of Canadians' knowledge, abilities and behaviours concerning personal financial management. It is fielded every five years and provides a comprehensive data set that demonstrates Canadians' approaches to day-to-day money management and budgeting, longer-term money management and general financial planning.

Researchers wishing to undertake more in-depth analysis on their own may request the CFCS Public Use Microdata File (PUMF) from Statistics Canada, which is available free of charge. For more information on how to access the data, please contact Statistics Canada's Client Services and Dissemination team at mailto:STATCAN.SSDClientServices-DESServicealaclientele.STATCAN@canada.ca.

Future research opportunities

FCAC is currently planning to re-field the CFCS in 2019. Over the next year, FCAC will explore opportunities to improve existing measures, while continuing to focus on the ongoing comparability of data over time. For example, FCAC will explore adding new questions to address knowledge gaps and better reflect the changing financial realities facing Canadians. Some existing survey questions, which have been of limited utility or are outdated in today's financial context, may be revised or eliminated. FCAC will engage national and international experts in this process. If you are interested in contributing to the development of CFCS 2019, please contact FCAC at mailto:FCAC.ResearchandPolicy-RechercheetPolitique.ACFC@fcac-acfc.gc.ca.

Financial Literacy and Retirement Well-Being in Canada: An Analysis of the 2014 Canadian Financial Capability Survey

Financial Consumer Agency of Canada (FCAC)

As Canadians grow older and the shift towards self-directed retirement planning continues, it is becoming increasingly important that Canadians understand what to expect in retirement and how to prepare. Using data from the 2014 CFCS, FCAC conducted an analysis of Canadians aged 55 and older to better understand the relationship between financial literacy and financial well-being.

The study modelled the impact of an increase in financial literacy on financial well-being among retirees and near-retirees. Specifically, the aim of the work was to identify the unique contributions of knowledge, skills and confidence on retirement well-being in Canada after having controlled for a number of important demographic variables (e.g., gender, marital status, education level and income). The two most important elements of financial literacy were found to be (1) financial confidence and (2) the skill of making use of advice on financial products. These variables were positively related to the indicators of financial well-being.

The results related to financial confidence are consistent with the literature, which indicates that psychosocial factors, such as self-efficacy and confidence, play an important role in leading to outcomes related to financial well-being. It was found that retirees who feel they are knowledgeable and capable of managing finances (e.g., making ends meet, choosing products) are more likely to report having a better standard of living. Similarly, near-retirees with higher levels of financial confidence are more likely to exhibit better indicators of financial well-being.

The analysis performed was cross-sectional in nature, meaning that cause and effect cannot be clearly delineated. For this reason, it is quite likely that the relation between financial confidence (as well as other variables in the models) and financial well-being in retirement and pre-retirement reinforce each other. For example, financial confidence probably enables consumers to be more active participants in their financial affairs, which in turn can lead to increased knowledge, skills and confidence.

The results suggest that retirees and near-retirees may benefit from experiential learning approaches intended to boost financial confidence. One such approach might focus on learning opportunities that allow consumers to gain first-hand experience with financial products and skills relevant to their own life circumstances.

The Link Between Financial Confidence and Financial Outcomes Among Working-Aged Canadians, and

Role of Financial Literacy in Financial Decisions and Retirement Preparedness Among Seniors and Near-Seniors

Social Research Demonstration Corporation (SRDC)

SRDC undertook two studies using data from the 2014 CFCS that demonstrated the importance of financial confidence as a predictor of financial outcomes. These studies are viewed as major contributions to the National Research Plan, as they are among the first studies to have examined the impact of financial confidence on financial decision-making in a Canadian context.

The studies found that the relative importance of financial knowledge and financial confidence depends on the type of financial behaviour. Financial confidence is a better predictor than financial knowledge when it comes to outcomes associated with day-to-day money and debt management (e.g., keeping up with bills, having a budget). In other words, the Canadians who do best at day-to-day money management are those who are confident in their abilities to make ends meet, to shop around for the best product, to stay informed on financial matters, etc. Day-to-day money management, it seems, is mostly a reflection of being organized and having healthy financial habits.

When examining longer-term planning and saving behaviours (e.g., investing, purchasing insurance), it was found that Canadians with the best outcomes are those who have high levels of both financial knowledge and financial confidence. Long-term planning requires knowledge of how financial products and services work (e.g., compound interest) and related concepts (e.g., risk diversification). This knowledge, coupled with the confidence to shop around and choose products, was found to be associated with the best long-term outcomes.

Poorer outcomes were found for both the "under-confident" and "overconfident", meaning that high financial confidence does not appear to "shield" those with low knowledge from relatively poor planning and saving outcomes. Those with low financial knowledge but high financial confidence also have a higher risk of experiencing negative financial outcomes. This is especially evident in retirees and near-retirees.

In general, this research highlights several ways in which confidence and knowledge may be linked with financial decision-making, and suggests that a one-size-fits-all approach to interventions is unlikely to reap dividends. Instead, interventions need to be informed by a better understanding of the mechanisms through which gaps in confidence and knowledge lead to poor outcomes, and tailored to the specific needs of those with different kinds of gaps. Further, experiential learning interventions are critical to

increase financial confidence and knowledge. A learning-by-doing approach allows individuals to learn from their own experiences to implement successful strategies in money management.

The Impact of Financial Education Participation on Financial Knowledge and Efficacy: Evidence from the Canadian Financial Capability Survey[1]

David Rothwell & Shiyou Wu

In this study, Dr. Rothwell and Dr. Wu sought to assess the relation between financial education, knowledge and self-efficacy. The authors used two waves of the nationally representative CFCS (2009 and 2014) to compare outcomes for Canadians who had taken a financial education course to those who had not. Financial self-efficacy was measured using a similar approach as that used to measure financial confidence in the aforementioned SRDC research and FCAC's study on the link between financial literacy and retirement well-being in Canada.

After matching and adjusting for demographic and economic factors, those who had participated in financial education exhibited higher financial self-efficacy scores. However, only male participants exhibited higher financial knowledge scores. The financial knowledge scores of women remained consistent regardless of their age groups.

The authors conclude that financial education is associated with improved financial well-being. Going forward, the authors propose the need for further consideration regarding the effectiveness of financial education among women and the importance of tailoring financial literacy interventions to life course and age group.

> *"Compared to just five years ago we know more about the factors that contribute to financial literacy. We have a growing empirical base to show that financial literacy is not just about financial knowledge. Financial confidence (self-efficacy) matters. We also know that financial education can build financial literacy under the right conditions."*
> – Dr. David Rothwell, Oregon State University

Key takeaways

- Financial knowledge is important, however, on its own is not enough to lead to financially desirable behaviours.
- Financial confidence is a better predictor than financial knowledge when it comes to outcomes associated with day-to-day money and debt management.

[1] This study is currently under review.

- More positive outcomes are found for longer-term planning and saving behaviours (e.g., investing, buying insurance), for individuals with high levels of both financial knowledge and financial confidence.
- High financial confidence does not "shield" those with low knowledge from relatively poor planning and saving outcomes. Those with low financial knowledge but high financial confidence also have a higher risk of experiencing negative financial outcomes related to long-term planning and saving behaviour. This is especially evident in retirees and near-retirees.

Application to financial literacy programs

- Interventions can benefit from addressing the specific needs of those who lack confidence in managing their finances and the decision-making processes that underlie their low levels of confidence.
- Experiential learning interventions are critical to increase financial confidence and knowledge as a learning-by-doing approach. These types of interventions provide individuals with opportunities to apply what they know (e.g., virtual economies for student learning). This allows individuals to learn from their own experiences and to implement successful strategies in money management.
- Financial literacy interventions related to planning and saving need to address the potential negative effects of overconfidence on financial outcomes.
- Financial literacy interventions could benefit from careful design and evaluation to provide important insights on which types of interventions are most successful and for whom.

Research opportunities

- Financial literacy interventions designed to enhance Canadians' financial well-being can be further informed by a better understanding of the psychosocial underpinnings of financial choices (e.g., financial confidence, perceptions of skills and financial knowledge). Further research to understand how to build financial confidence would be beneficial for the design and delivery of these interventions.
- Current research exploring the role of psychosocial factors in financial decision-making is limited by cross-sectional data, meaning that cause and effect cannot be clearly established. Further research in this area would benefit from longitudinal data that explores financial decision-making and the contributing factors over time.
- To study the impacts of financial education programs, additional information is needed regarding the type of education provided, its duration and whether it was completed. Currently, the CFCS does not provide this level of detail.

2.0 Applying behavioural insights to financial literacy interventions

Behavioural economics has taught us that humans are not always rational beings and that they are often influenced by behavioural biases. People act and behave in irrational ways and behaviour varies depending on the situation and context. This section describes important advances in the delivery of financial literacy interventions that are being informed by behavioural insights.

Insights from behavioural economics are shaping the evolution of financial education, helping practitioners tailor interventions that address the ways consumers make decisions within the contexts of their daily lives. Behavioural insights are also identifying tools researchers and practitioners can use to empower financial consumers.

Richard Thaler, U.S. academic and pioneer of behavioural economics, is best known for his "nudge" theory, which has had a tremendous influence on policy makers around the world. Dr. Thaler won the 2017 Nobel Prize in economics for his research demonstrating how traits, such as lack of self-control and fear of losing what you already have, prompt decisions that do not always result in the best outcomes in the longer term.

A number of projects in the National Research Plan are exploring the application of behavioural economic insights to financial education and financial decision-making behaviours. A key area of focus is helping consumers to understand financial products and services in the increasingly complex marketplace. In certain cases, the research has used choice architecture and "nudges" to enable consumers to take action, while other studies have focused on simplifying information, processes and using just-in-time information to influence behaviour. Findings emerging from this behavioural research are described below.

"Canadian investors are receiving more information about their investments than ever before with the introduction of new disclosure practices based on behavioural insights (i.e., plain language). Several bodies, including The Investment Funds Institute of Canada, are conducting research to understand how these new reports are helping investors to understand how their accounts are performing and the fees that they are paying. We hope to gain insights into what differentiates effective disclosure and to use these learnings to fine tune industry and regulatory approaches to investor education." – Jan Dymond, Investment Funds Institute of Canada

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2.1 Studies that apply behavioural economic insights to financial education and financial decision-making behaviours

Refund to Savings Initiative

Washington University in St. Louis

FCAC has been exploring opportunities to apply behavioural approaches to encourage Canadians to save money for unexpected expenses. The Agency examined approaches used in other jurisdictions, such as the U.S. project entitled Refund to Savings (R2S). This initiative is the largest saving experiment conducted in the U.S. to date. R2S builds a saving-promotion experiment into a TurboTax software product, which is available free to low- and moderate-income households. The R2S Initiative is designed as a "nudge" to influence saving related decisions. The R2S team recognized tax season as a "golden moment" to improve savings rates.

Over the past several years the R2S team has experimented with different behavioural interventions with U.S. tax filers, including: messaging prompts to save; emails priming filers to think about saving; choice architecture to make the savings decision more prominent; and anchoring—in which the software suggests a specific proportion of a tax return (e.g., 50 percent, 100 percent, etc.) that tax filers could allocate to savings.

The results of this work to date have been very positive. In 2015 alone, R2S prompted 21,012 more low to moderate income tax filers to save, translating into $35.6 million in funds deposited into savings vehicles.

By leveraging tax-filing software to reach millions of tax filers, the R2S initiative offers a "low-cost, low-touch, and highly scalable intervention" in which a participant can make a positive financial decision in a few seconds that has a lasting impact.

Financial Literacy in a Box

Behavioural Economics in Action at Rotman (BEAR)[2]
Avni Shah, Dilip Soman, Alice Luo and Yelim Chung, University of Toronto

Financial Behaviour Online: It's Different

Behavioural Economics in Action at Rotman (BEAR)
Jessica An, Melanie Kim, and Dilip Soman, University of Toronto

Cognitive barriers to financial decision-making prevent consumers from taking control of their finances. These barriers are reinforced by the complexity and volume of financial information that consumers are asked to process daily. Thus, research into how consumers process this information, and how this information can be presented in a more consumer-friendly manner is becoming more prevalent.

Two initiatives were recently undertaken by the BEAR research centre that demonstrate how presentation of information influences consumers' perception of that information, which ultimately shapes their decision-making process.

Financial Literacy in a Box (FLIB) is a set of tools that aims to bridge the gap between the goals of a financial education program (e.g., knowledge acquisition) and effective decision-making. The tool does this in part by highlighting and reminding people, at the time they are making a financial choice, of what they previously learned through financial education. The research indicates that doing this will increase the consumer's awareness of the situation and their options, empowering them to make a decision in an informed manner.

The current focus areas of FLIB are the Registered Education Saving Program (RESPs) and the Canadian Pension Program (CPP). For example, one of the FLIB initiatives was the development of a simple and visually-appealing wallet card for parents with key information and critical steps for setting up an RESP.

BEAR researchers are also working on applying behavioural insights to the unique needs of consumers in an online environment. To this end, one of the more progressive ideas being explored is the idea of avatar-aided decision-making. This concept relies heavily on the behavioural economic evidence related to social norming and anchoring:

- When faced with multiple financial decisions, consumers have a tendency to seek the opinions of others in similar situations and to emulate those decisions for their own purposes.

[2] Behavioural Economics in Action at Rotman (BEAR) is a centre (at the Rotman School of Management, University of Toronto) that combines decades of research in decision-making with empirically tested tools to facilitate behavioural change. Researchers look at social and economic problems from a behavioural science lens and design solutions that go beyond the traditional approaches of applying incentives, penalties or provisioning information.

- The authors argue that this insight can be effectively applied to online tools through avatars—or an icon that represents a person at an easily identifiable life stage (e.g., a student, a retiree, a parent, etc.).
- The idea is that consumers who are using an online tool as they research a financial decision could jump-start the process by choosing from a small group of avatars. Consumers can identify the one that best resembles themselves and will be presented with options that others have used at this stage of life.
- This approach simplifies the decision-making process by presenting choices more closely associated with an individual's own context, while giving people a sense of comfort in knowing that their peers make similar choices.

The authors recommend that ongoing research should continue to examine the effectiveness of financial decision-making that has been enabled by the use of avatars.

> *"Individual choices are context dependent, meaning that they can be influenced by the way information is presented, the presence of others, emotions, physical environment and time of day."* – **Dr. Dilip Soman, University of Toronto**

2.2 An innovative approach to reaching Canadians and encouraging budgeting behaviour

The National Research Plan also included research projects that applied a mix of behavioural and traditional economic insights. The following study describes an innovative approach to targeting a specific group of Canadians (non-budgeters) through a mobile application that encourages them to create a budget for themselves. The application incentivizes behaviour by awarding users loyalty rewards points and also applies behavioural insights such as simplifying information, using social norm techniques and tailoring information to influence behaviour.

Initiating Budgeting Behaviour among Non-Budgeters: A Financial Literacy Pilot Using Mobile Technology

Financial Consumer Agency of Canada (FCAC)

Budgeting was identified as an important area of focus for the National Research Plan. The overall objective of the pilot project was to examine the impact of FCAC's financial education materials on knowledge, confidence and behaviours related to budgeting, through an interactive mobile app that offered rewards for participating in financial education.

The pilot project was first launched in British Columbia and Newfoundland in summer 2016, and was expanded to Ontario in fall 2017. Results are overwhelmingly positive.

Individuals who did not have a budget and who progressed through the three-week pilot program demonstrated measurable improvements across all three tracked metrics (confidence, knowledge and behaviour).

Additionally, participants who received financial education materials as part of the pilot scored better across all metrics compared to the control group, suggesting that directly targeting financial education to consumers has the potential to drive positive behavioural change and improve financial well-being for large numbers of Canadians. Canadians were highly engaged in this initiative, which also speaks to potential opportunities to further reach individuals through mobile technology and rewards programs.

The findings of FCAC's pilot project through the Carrot Rewards app provide a rich source of data and information. They point to a number of broad messages with program implications for financial literacy education and far beyond.

Some key starting points for future action and investigation:

- Not enough Canadians have a budget.
- Almost half of those who did not have a budget, do not know where to begin.
- Targeting non-budgeters with budgeting information and resources leads to measurable differences in related knowledge, confidence and budgeting behaviours.
- Confidence appears to be associated with persistent budgeting behavior—those who persist with their new budget demonstrate increased confidence in their ability to make a follow a budget. Those who discontinue budgeting, tend to be those who haven't gained relevant confidence.

As next steps, FCAC intends to continue its budgeting research through the Carrot Rewards app and will follow-up with individuals to assess impacts on overall financial well-being and any potential barriers to budgeting. Specifically, future research will focus on:

- Understanding how knowledge, confidence and behaviour have persisted over time;
- Understanding how individuals budget; and,
- Understanding how budgeters differ from non-budgeters.

Key takeaways

- Understanding why and how consumers behave is an integral element in driving better financial decision-making.
- Choice architecture and other behavioural techniques can enable individuals to save their tax refunds for emergencies and pay down debt.
- Simplified, just-in-time information helps to bridge the gap between knowledge and decision-making.
- The online environment is ideal for social norming and anchoring techniques (e.g., avatar-aided decision-making).
- Informational tools, mobile applications and nudge interventions appear to be effective at solving well-known problems such as behavioural biases, and can be thought of as important complements to existing financial literacy interventions.

Application to financial literacy programs

- Financial literacy programs and tools can be augmented through the application of behavioural insights.
    - For instance, program participants might benefit from a just-in-time, follow-up email or text (e.g., during tax or RRSP season) that reminds them of key takeaways from a given workshop.
    - Online resources can benefit from visual aids and other devices that build on social norms and anchoring, to enable consumers to quickly choose the right option for them.
- There are opportunities to use technology (e.g., mobile apps) and incentives (e.g., rewards) to make financial education more appealing to Canadians.

Research opportunities

- Behavioural insights (e.g., choice architecture, anchoring, social norming) have been shown to be effective in helping individuals parse through the volume of information available to them and to make decisions. Because financial situations are often unique to each individual, financial literacy is important in understanding options and assessing choices. As such, financial literacy research could benefit from further examination of the impact of behaviourally-informed interventions on financial knowledge and confidence.

3.0 More targeted financial literacy

Financial literacy and wellness is not one-size-fits-all—Canadians have varying challenges and needs, and may face multiple socio-economic barriers that impact their overall financial well-being.

Financial situations are often unique to each individual. There is an opportunity to better **target financial literacy interventions** to:

- address the realities of specific populations of Canadians—such as Indigenous Peoples, seniors, youth and newcomers; and,
- enable Canadians to make informed financial decisions when faced with expected (e.g., starting first job, buying a home) and unexpected (e.g., losing a job, caring for someone who is ill) life events.

Additional supports are necessary to overcome systemic barriers and to increase the relevance and cultural appropriateness of financial literacy interventions.

As part of the National Research Plan, several studies have been conducted to gain insight into the context and needs of specific populations. For example, studies seek to understand the role of the broader socio-economic context in financial well-being, the unique financial literacy needs of priority groups, and how financial literacy indicators need to be adapted to address the unique realities of priority groups. Evidence that is emerging through the execution of the Plan is intended to be used to enhance financial literacy programs and services across Canada. It will also serve to inform concrete and actionable evidence-based policy and program interventions to enhance financial well-being and financial consumer protection.

While this section presents research related to Indigenous Peoples, asset poverty in Canada, and caring for a loved one, other areas of the report explore financial literacy outcomes with respect to seniors and youth.

3.1 Understanding financial wellness for Indigenous Peoples

Financial wellness is understood by Indigenous Peoples as the continuous process of balancing income, saving, investing and spending to achieve one's life goals (physical, emotional, mental and spiritual) over the life cycle, as well as maintaining a state of wellness for individuals, families and communities. Financial wellness is influenced by: societal and institutional structures, policies and practices; personal financial literacy and behaviour; and cultural beliefs and values.

Indigenous Peoples face unique barriers to their financial wellness. For example,

- Some communities enjoy access to greater resources, while others experience economic challenges arising from remoteness, high costs for basic goods and services, housing and energy; and,
- Communities also vary when it comes to direct access to mainstream financial institutions and services. Depending on their geographic location, some communities may have very limited or no local access to safe and affordable financial services.

First Nations Financial Wellness Project

AFOA Canada and Prosper Canada

Prosper Canada and AFOA Canada have developed an evidence-based Indigenous financial wellness framework based on this understanding and research on promising practices for improving the financial well-being of Indigenous communities.

> *"The financial wellness framework informs the development of culturally relevant programs and services."* – **Simon Brascoupé, AFOA Canada**

Community based financial literacy programs and tax clinics are being developed and piloted in First Nations communities in Northern and Southern Ontario as part of the First Nations Financial Wellness Project. Communities receive training and assistance to offer tailored support in one or more of the following areas:

- education—workshops that provide tools and knowledge needed to manage money
- support—one-on-one assistance to help people with a financial challenge or to reach a goal
- access—help to access income benefits, banking services and opportunities to save, that contribute to overall financial wellness. Access to tax filing and income boosting benefits has emerged as a need and priority in their work with First Nation communities.

This work provides insights in areas (e.g., the needs, skills and behaviours of Indigenous Peoples) where more traditional research has had difficulty generating robust outcomes and findings. Research to gain insights on the knowledge, abilities and behaviours concerning personal financial management for Canadians is mostly conducted off-reserve (e.g., CFCS). Findings are often disaggregated for Indigenous Peoples, however, these may not be accurate, given that Indigenous Peoples view financial wellness through a different lens than other Canadians. Further, there are a number of systemic barriers that impact the financial decision-making of Indigenous Peoples. As such, it is important to consider a culturally-relevant definition of financial wellness in measurement tools to fully understand the financial needs of Indigenous Peoples. The

research conducted by AFOA Canada and Prosper Canada is a major contribution to the field.

3.2 Understanding Asset Poverty in Canada

Individuals living on very limited financial resources (low income and few or no financial assets) are often required to make difficult financial decisions on a day-to-day basis, since they must spend a disproportionate amount of income to meet basic needs like food, shelter and clothing. Some groups of Canadians are more vulnerable to living on a low income, namely, unattached adults aged 45 to 64, people living with disabilities, single parents, Indigenous Peoples, and newcomers to Canada. Financial literacy can assist individuals and families to access relevant information and resources in order to improve their financial situation and learn how to make more informed financial choices.

Regardless of income, many households lack resources (e.g., savings, assets, investments) that are sufficient to provide for basic needs for a period of three months. The following study provides insights on household vulnerabilities and emerging issues that affect financial well-being for many Canadians.

The Prevalence and Composition of Asset Poverty in Canada: 1999, 2005 and 2012

David Rothwell, Oregon State University, and Jennifer Robson, Carleton University

Research into poverty often focuses on income poverty, or a household's inability to generate enough income to meet their financial needs. However, another important concept to consider is that of asset poverty. A household is considered asset poor if its assets (financial assets or net worth, taken separately) are insufficient to maintain well-being at a low-income threshold for three months.

Using data from the 1999, 2005 and 2012 cycles of the Survey of Financial Security (SFS), and juxtaposing these estimates with income poverty, the authors provide the first estimates of national-level asset poverty in Canada. In 2012, an estimated 49 percent of working-age Canadians were considered to be in financial asset poverty. Households with the highest asset poverty rates were found to be those headed by younger adults, single mothers, and persons with a high school diploma or less. For adults aged 25 to 44, the risk of asset poverty was greater than the risk of income poverty. However, the opposite holds true for very young adults. Asset poverty was also higher than income poverty for single male fathers. Among women, the difference in rates of asset poverty for those who hold a university degree as compared to a post-secondary certificate were much higher than income poverty rates.

Additionally, the analysis provides insights into Canadians at risk of income poverty. When considering family structures, couples have a lower risk of income poverty when compared to singles, with single males having the greatest risk of income poverty. Deeper analysis accounting for immigration status shows that, despite higher levels of income poverty among non-Canadian born residents, there is no significant difference in asset poverty between the two groups.

The analysis provides new insight into economic insecurity by showing that asset poverty rates are consistently two to three times higher than income poverty rates. Meaning that, regardless of income, many households lack resources (e.g., savings, assets, stocks) that are sufficient to provide for basic needs for a period of three months. The study lays a foundation of findings on which to build future research on income and asset poverty in Canada. The authors also urge these findings to be used when developing social policies.

Dr. Rothwell and Dr. Robson have also conducted additional research using microdata on household vulnerability in Canada (1999 to 2014) through the SFS (1999, 2005 and 2012) and Canadian Financial Capability Survey (2009 and 2014). They examined other proposed indicators of household financial vulnerability including: allocation of assets into liquid vehicles, participation in fringe financial services and difficulty in meeting financial obligations.

Here are highlights of their findings to date:

- Older Canadians are at a lower risk of incurring credit card debt and illiquidity problems as well as having insufficient funds to cover an unexpected expenditure. In contrast, younger adults are at a higher risk of not sticking to a budget and falling behind on loans and bills.
- Those with lower incomes have less risk of incurring credit card debt and illiquidity, but have greater risk of being unable to absorb an emergency expense and use a household budget.
- Home owners have less risk of earning low incomes and having low net worth, missing bill payments and having insufficient funds to absorb an emergency expense. However, they have higher risks of illiquidity and not sticking to a budget.

This preliminary work suggests substantial variation in household behaviour and a more complex picture than that painted by measures of income and debt alone.

About the General Social Survey (GSS)

Established by Statistics Canada in 1985, the General Social Survey (GSS) was designed to gather data on social trends to monitor changes in the living conditions and well-being of Canadians, and to provide information on specific social policy issues. The GSS is administered every five years to collect nationally representative, cross-sectional data on the following six topic areas: caregiving, families, time use, social identity, volunteering and victimization.

About the Survey of Financial Security (SFS)

The Survey of Financial Security (SFS) was designed by Statistics Canada to collect information from a sample of Canadian households on their assets, debts, employment, income and education. The SFS provides a comprehensive picture of the financial health of Canadians. Information is collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts.

Access to the GSS and SFS Data

Researchers wishing to undertake more in-depth analysis on their own may request a Public Use Microdata File (PUMF). A PUMF, including documentation, is produced for both the GSS and SFS and are available, free of charge. For more information on how to access the data, please contact Statistics Canada's Client Services and Dissemination team at STATCAN.SSDClientServices-DESServicealaclientele.STATCAN@canada.ca.

3.3 Exploring the relationship between family caregiving and family finances

Building savings and planning for unexpected expenses is a priority for the National Research Plan. With this in mind, Dr. Duncan and colleagues undertook research that examined the prevalence and amount of care-related out-of-pocket expenditures of family caregivers and the factors that influence this spending.

> *"Being a caregiver to a relative or friend with long-term health, disability or aging related needs is a common experience for Canadians. Spending out-of-pocket on care-related needs is commonplace, the amount spent can be considerable, and in some cases this spending can result in financial hardship for caregivers."* – **Dr. Karen Duncan, University of Manitoba**

Care-Related Out-of-Pocket Expenditures in Canada

Karen Duncan, Shahin Shooshtari, Kerstin Roger, Janet Fast (University of Alberta), and Han Jing, University of Manitoba

Using the 2007 GSS data, authors found that:

- 35 percent of respondents aged 45 or older—1.2 million Canadians—reported care-related out-of-pocket expenditures, which amounted to almost $12.6 million.
- Caregivers who were more likely to incur these costs reported higher levels of stress.
- Out-of-pocket spending is common among Canadian caregivers and can be substantial, potentially increasing financial vulnerabilities.

Dr. Duncan and colleagues have undertaken further research into the relationship between family caregiving and family finances, to better understand the prevalence of poor financial outcomes (e.g., selling assets, taking out loans) among family caregivers and which caregivers are at risk. Using the 2012 GSS data for this study, preliminary findings show that:

- the proportion of Canadian family caregivers incurring out-of-pocket expenses has increased to 42 percent for Canadians 45 years of age or older.
- Among all caregivers with out of pocket expenses, 18 percent incurred financial hardship.
- Most caregivers (over 90 percent) modified their spending to cover care-related expenditures, 73 percent used savings, 35 percent borrowed money from friends and family, 31 percent took out loans, 19 percent sold assets and eight percent did something else.

Going forward additional research can focus on investigating the relationship between family care-giving, financial stress and financial outcomes as they relate to levels of financial literacy.

3.4 Financial literacy in the workplace

This section examines the importance of financial literacy in the workplace and Canadians' preferences for financial literacy topics and program delivery methods within their workplace.

3.4.1 Research examining the importance of workplace financial literacy

Many Canadians spend a majority of their time at work. During consultations held by FCAC in 2014, individuals, non-profit organizations, private sector businesses and government stakeholders all emphasized the importance of making financial literacy information easily available in workplaces.

> *"Promoting economic security among employees is a positive investment employers can make and not just for the employees. Whatever the demographics of the workforce, companies will benefit when personnel are financially aware and responsible for their income and savings. Increasingly, financial literacy education is perceived as a key employee benefit on a par with healthcare."* – Cairine Wilson

In the workplace, financial literacy messaging can be integrated in pension and benefit information, through human resources and employee assistance programs, and in training or education initiatives.

The impact of low financial literacy levels on the well-being of Canadian workers and their families is evidenced in the levels of stress created by concerns about money. For example:

- A 2014 Financial Planning Standards Council survey found that 42 percent of Canadians rank money as the greatest source of stress—more stressful than work, health or family obligations.
- Financial stress affects health and workplace performance and productivity and increases absenteeism. It could cost an organization several hours a week for a financially distressed employee to deal with financial problems.
- The Health and Wealth Wellness study conducted by Manulife and Ipsos Reid in 2014 found that, of those employees who are financially prepared in life[3], 22 percent are more engaged, 21 percent are more likely to enjoy their work and 18

[3] In this study, financially prepared refers to having a financial plan, a debt management plan and appropriate level of debt, and saving sufficiently for retirement with a retirement savings plan.

percent are more motivated to do their best work than those who are not financially prepared.

- The Business Case for Financial Education showed that every dollar invested in the financial education of employees provides a three-dollar return through decreased absenteeism, increased productivity and overall employee satisfaction.

The workplace is a promising avenue for reaching and engaging adult Canadians in financial literacy, and further research can shine the light on the most effective approaches.

3.4.2 Research examining preferences for workplace financial literacy

> *"We know that working Canadians are struggling to make ends meet financially and that half of employees feel that financial stress is impacting their work performance. They are demonstrating a strong appetite for employer-provided financial literacy education to support their financial planning and retirement goals. Employers may be uniquely positioned to support employee financial literacy and wellness programs, thereby improving employee productivity, by providing resources to their employees in the workplace."* – Janice MacLellan, Canadian Payroll Association

In 2017, FCAC included ten questions in the Canadian Payroll Association's (CPA) annual survey of employees in Canada to examine financial stress, behaviours (such as budgeting, seeking advice) and preferences for financial literacy in the workplace. CPA's findings demonstrate that 82 percent of Canadians are interested in workplace financial education programs. Specifically, education related to savings and planning is the most sought after workplace financial education program (43 percent), followed by education related to financial products and services (29 percent), and budgeting and money management (28 percent).

Findings demonstrate that the majority of Canadians (59 percent) would prefer to attend workplace education programs during work hours (e.g., such as a lunch and learn) while 33 percent would prefer to use a recorded webinar that can be accessed at any time. Such programs may provide a key resource for retirement planning. Currently, the most common source for retirement planning information is a financial advisor or planner (22 percent) followed by a bank (16 percent), and family or friends (16 percent).

> *"There are large potential benefits from having a more financially literate workforce; however, the varying needs across workers should be taken into consideration when designing and offering financial education in the workplace."* – Dr. Pierre-Carl Michaud, HEC Montréal

Overall, there is consensus that financial literacy is important and that the workplace is one channel of reaching Canadians. That said, further research is required to understand the most effective approaches in the workplace. In a recent article that explored the value of financial literacy and financial education of workers, Dr. Pierre-Carl Michaud highlights that opportunities for future research include the need to better understand the dimensions of financial knowledge and how financial knowledge might allow individuals to manage their money and debt more effectively over the course of their lives. Dr. Michaud notes that workplace financial literacy programs could benefit from field experiments to evaluate what works best for whom and how to improve the cost-effectiveness of these interventions.

3.5 Gaining insights about payday loan users

Payday Loans: Market Trends

Financial Consumer Agency of Canada (FCAC)

FCAC conducted a pan-Canadian survey of 1,500 payday loan users to gain insights into payday loan users, and their reasons for using payday loans. The findings offer a range of insights that can inform the development and promotion of consumer educational resources. For example:

- Many payday loan users were unaware of the high costs. Less than half of respondents (43 percent) understood that a payday loan is more expensive than available alternatives. This suggests that many do not have sufficient knowledge to consistently make the borrowing decisions that best serve their financial well-being.
- One of the reasons why payday loan users are unaware of the relative costs may be that many are not currently accessing alternatives. More than 60 percent of respondents said they did not have access to a credit card—compared to 13 percent of Canadians generally—and 88 percent said they did not have access to a line of credit. This could be due to a combination of factors. While some borrowers may be unaware of options available at traditional financial institutions, others may have been ineligible for credit.
- Most payday loan users reported borrowing to cover necessary expenses. Roughly 45 percent of respondents reported typically using payday loans for unexpected, necessary expenses such as car repairs, while 41 percent used the money for expected, necessary expenses such as utility bills. Compared to the general population, respondents were also substantially less likely to have savings.

- The study also found that the use of payday loans was not restricted to low-income Canadians. While payday loans are primarily used by those with low-to-moderate incomes (more than half lived in households with annual incomes under $55,000), many higher-income Canadians also reported accessing these loans. Twenty percent of respondents reported household incomes exceeding $80,000, with seven percent over $120,000.

In terms of next steps, there is a pressing need to elevate consumer awareness about the costs of, and alternatives to, payday loans. To achieve this:

- FCAC has been promoting its consumer education resources on payday loans and is working with provinces and territories on a coordinated, pan-Canadian approach to informing consumers about these topics.
- FCAC has created new consumer education material on the importance of maintaining an emergency fund, and resources will be promoted to assist consumers in accessing professional advice when they need assistance to pay down debts.

"Strong financial literacy skills and apt professional advice together with accessible, useful and affordable financial services will ensure that all Canadian consumers choose the most cost-effective options to meet their financial needs." – Dr. Brenda Spotton Visano, York University

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Key takeaways

- Indigenous Peoples face unique barriers to their financial wellness. These should be reflected in the design and delivery of financial literacy interventions as well as measurement tools to fully understand the financial behaviour of Indigenous Peoples.
- There is substantial variation in household behaviour that is much more complex than can be understood by measures of income and debt alone. Other factors, such as asset poverty and financial stress should be further explored.
- Money is the main source of stress for many Canadians—higher than for work, health or family obligations. More than half of Canadians are interested in workplace financial education programs. Specifically, education related to savings and planning is the most sought-after workplace financial education program.
- Most payday loan users are borrowing to cover necessary expenses. In addition, many payday loan users are unaware of the high costs of payday loans compared to their alternatives. It is also important to note that payday loans are not restricted to low-income Canadians.

Application to financial literacy programs

- Findings from pilots conducted as part of the First Nations Financial Wellness Project should be considered in the development and delivery of financial interventions with Indigenous Peoples.

- Financial literacy programs offered in the workplace contribute to improved financial wellness and are a meaningful addition to corporate wellness programs.
- Additional consumer education resources are required to assist consumers in understanding the alternatives to payday loans, the relative cost of a payday loan, and the importance of maintaining an emergency fund.

Research opportunities

- More field experiments are necessary to better target financial literacy interventions and to evaluate what works, and for whom.
- Further research is needed to better understand income and asset poverty in Canada and to inform the development of related social policies.
- Additional research is needed to explore the relationship between family care-giving, financial stress and financial outcomes flowing from levels of literacy.

4.0 International perspectives

Canada takes an active role in financial literacy measurement at the international level. Findings from this research enable policy makers to identify emerging trends and issues and design appropriate responses to address gaps. Where similar patterns are identified across countries, there are also opportunities for researchers and stakeholders to work together to develop evidence-informed approaches for improving financial literacy.

As part of the National Research Plan, Canada participated in two major global surveys of financial literacy: the OECD/INFE Survey on Measuring Financial Literacy and Financial Inclusion; and the OECD Programme for International Student Assessment (PISA) Financial Literacy Assessment.

4.1 Measuring financial literacy and inclusion

OECD/INFE Survey on Measuring Financial Literacy and Financial Inclusion

Financial Consumer Agency of Canada

In 2015, FCAC participated in a survey on financial literacy and financial inclusion coordinated by the Organisation for Economic Co-operation and Development (OECD) and the International Network for Financial Education (INFE). The survey targeted Canadian adults with the objective of adding to the knowledge about Canadians' financial literacy and their money and debt management behaviours. It also provided Canada an opportunity to compare financial literacy outcomes with other countries. The goal of this initiative was to inform policies and strategies for financial education.

About the OECD/INFE Survey on Measuring Financial Literacy and Financial Inclusion (2015)

The OECD invited countries to participate in an international data collection exercise for measuring financial literacy and financial inclusion using a core questionnaire designed for global use. Participating countries were requested to collect data from a representative sample of (at least) 1,000 adults and submit the results to the OECD/INFE for analysis. This allowed for a comparison of key information about the financial knowledge, attitudes and behaviour of adults, as well as levels of financial inclusion and indicators of financial well-being across a wide range of countries.

Canada ranked third globally on financial knowledge, attitudes and behaviour among the 30 countries that participated in the OECD/INFE Survey. Among the study findings:

- 85 percent of Canadians rated their financial knowledge as average or above, however, only 61 percent were able to answer five of seven (70 percent) of financial knowledge questions correctly.
- Canadians scored well on questions related to interest (93 percent), inflation (92 percent), risk and return (86 percent), and diversification (68 percent), but scored less well on questions relating to the calculation of interest and principal (58 percent), the time value of money (57 percent), and interest compounding (39 percent).
- Generally speaking, Canadian women appear to be[4]:
    - Less financially knowledgeable than men;

[4] These findings were also consistent with the following two studies conducted using the 2014 Canadian Financial Capability Survey data: FCAC, *Managing money and planning for the future: Key Findings from the 2014 Canadian financial Capability Survey, 2015;* Marie Drolet, *Gender Differences in the Financial Knowledge of Canadians,* Statistics Canada, 2016.

  - Less likely than men to consider themselves "financially knowledgeable";
  - Less likely to state that they "know enough about investments to choose the right ones that are suitable for their circumstances", and;
  - Less likely to know how much is needed to save for a comfortable retirement
- Financial knowledge varies between men and women, with 69% of men achieving the minimum scores on financial knowledge compared with only 56% of women in OECD countries. Knowledge scores remain significantly lower for women than men after controlling for country level differences, age and education. Conversely, on metrics related to financial behaviours (e.g., budgeting, planning for the future, shopping around, etc.) and financial attitudes towards the future (e.g., demonstrating a preference for long-term planning) women in OECD countries outperform their male counterparts.
- When couples share the responsibility for the long-term financial management of the household or where women's contribution to household income is similar to that of their male partner, there is no gender difference in financial knowledge.
- Men are significantly less likely to have a positive attitude toward future finances than women. Overall, more than six in ten Canadians indicate an attitude that favours the long term.
- The majority of Canadians (79 percent) are active savers.
- When considering money management, 87 percent of Canadians agree with the statement "I pay my bills on time."
- Approximately one-third (32 percent) of Canadians report their living expenses are sometimes greater than their income and almost half of these individuals (48 percent) used some form of credit to make ends meet within the past 12 months.
- With the loss of a primary source of income, one half of Canadians would need to borrow or move within six months. Among households with an income below $56,000, this proportion is much greater (70 percent).

The OECD/INFE Survey on Measuring Financial Literacy and Financial Inclusion findings align with FCAC's analysis of the 2014 CFCS and highlight similar financial literacy gaps and needs of Canadians. These include tracking expenses, keeping up with financial commitments and levels of financial confidence. The OECD/INFE are planning to re-field the financial literacy and financial inclusion survey in 2020. The Canadian data of the 2015 OECD/INFE Survey on Measuring Financial Literacy and Financial Inclusion are available to researchers. For more information on how to access these data, please contact FCAC.ResearchandPolicy-RechercheetPolitique.ACFC@fcac-acfc.gc.ca.

Key takeaways

- Generally, compared to other countries, Canadians score well on basic financial literacy questions and are moderately confident in their knowledge. However, women scored worse than men on knowledge-based questions, particularly those relating to inflation and compound interest.
- Knowledge scores are significantly lower for women than men, however, on metrics related to financial behaviours (e.g., budgeting, planning for the future, shopping around, etc.) and financial attitudes towards the future (e.g., demonstrating a preference for long-term planning) women in OECD countries outperform their male counterparts.
- When couples share the responsibility for the long-term financial management of the household or where women's contribution to household income is similar to that of their male partner, there is no gender difference in financial knowledge.
- By actively saving and using financial tools such as budgets, Canadians are able to better pursue and achieve long-term financial goals.
- Some Canadians have a difficult time making ends meet, many of those who struggle to make ends meet turn to credit.
- Lower-income households are more susceptible to negative financial outcomes when faced with a financial shock such as a loss of income for six months. In this case, lower-income households have a greater risk of incurring more debt or relocating their principal residence.

Application to financial literacy programs

- When implementing and delivering financial education for women and girls, it is recommended to:
- Identify specific 'teachable moments' and learning contexts, including schools, the workplace, women's networks, communities, and self-help groups.
- Tailor delivery methods to women's needs, leveraging the influence of female role models, peer group learning and sharing, and the use of innovative tools.
- Combine financial education with access to formal financial products and with entrepreneurial education to improve women's overall access to economic and financial opportunities.
- Systematically monitor and evaluate all financial education programmes, to help identify any divergence in expectations, learning preferences, and programme outcomes between male and female participants.

Research opportunities

- Further research to analyse the differences in financial literacy across countries would provide insights on whether factors associated with financial literacy in one country can be generalized to other countries. In addition, this research would offer opportunities to explore unique national characteristics impacting financial literacy in each country and could be used to inform public policy decisions.

4.2 Measuring financial literacy of Canadian youth

Measuring up: Canadian Results of the OECD PISA 2015 Study: The Performance of Canadian 15 year-olds in Financial Literacy

Council of Ministers of Education, Canada (CMEC), Employment and Social Development Canada (ESDC), and FCAC

In 2015, Canada participated for the first time in an international youth Financial Literacy Assessment, spearheaded by the OECD Programme for International Student Assessment (PISA). The study surveyed 15 year-olds in 15 countries/economies, including seven Canadian provinces.

Overall, Canada ranked second, tied with Belgium. According to the results, 87 percent of Canadian students demonstrated at least a baseline level of financial literacy, defined by the OECD as allowing them "to participate fully in modern society". In addition, 22 percent of Canadian students demonstrated advanced levels of financial literacy—well above the OECD average. Canadian students who discussed money matters with parents tended to score higher, with those discussing money matters at home once or twice a week ranking the highest.

> *"The results from the OECD PISA study are encouraging for Canadians. Strengthening financial literacy will help children grow into adults who can thrive in an increasingly complex financial marketplace. This requires not only the skills taught in the classroom, but the skills and lessons learned from families, financial institutions, and greater society."*
> **– Jodi Letkiewicz, York University**

Across Canada, the majority (78 percent) of 15-year-old students held bank accounts. This is significantly higher than the OECD average of 57 percent. Results show that students who held bank accounts outperformed those who did not on the financial literacy assessment.

PISA results also demonstrate that most Canadian students discuss money matters with their parents between once a month and twice a week. These students scored significantly higher than those who never or hardly ever discussed money with their parents.

Programme for International Student Assessment (PISA)

PISA is a collaborative effort among member OECD countries that surveys 15-year-old students around the world. Conducted every three years, PISA assesses students' levels of knowledge and skills that are essential for full participation in modern societies.

In 2012, an optional financial literacy assessment was introduced. Canada participated in this new component for the first time in 2015, when close to 48,000 students from 15 countries and economies participated, including approximately 3,400 15-year-olds from seven Canadian provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, and British Columbia).

Data also suggest that most 15-year-olds in Canada save money regularly: 33 percent saved varying amounts of money each week or month, 20 percent saved the same amount of money each week or month, 20 percent saved money only when they wanted to buy something, and 17 percent saved money only when they have some to spare. Only four percent reported they do not save any money and seven percent reported that they do not have any money so they do not save. This pattern is similar to the OECD average.

In Canada, there were no gender differences; however, across the OECD countries, there was a small gender gap whereby girls slightly outperformed boys.

It is encouraging that Canadian students have demonstrated a high level of financial literacy compared to their peers internationally, but results also show that there are some students in Canada who are not performing as well. Further investigation into the characteristics of the students who are struggling could help determine the best ways of helping them attain the knowledge and skills required to make good financial decisions.

FCAC sponsored Canada's participation in the financial literacy component of the PISA assessment in 2015, and plans to do so for the 2018 survey. Results will provide a basis for measuring progress and identifying new areas of focus relevant to youth. For more information on how to access these data, please contact FCAC.ResearchandPolicy-RechercheetPolitique.ACFC@fcac-acfc.gc.ca.

Key takeaways

- Canada is one of the top-performing countries in youth financial literacy. Results also show that there is a subset of students in Canada who are not performing as well.
- It is important for students to learn to manage money early in life. Opening a bank account and having ongoing conversations with parents about money seem to be ways to support them in doing this. For example, students that had bank accounts and students who discussed money matters with their parents once or twice a week scored better compared to their peers who did not.

Application to financial literacy programs

- In contrast to traditional methods of offering financial education, a simulated, experiential approach may be more effective in engaging students on the topic of financial literacy and improving their financial knowledge, confidence and behaviours.

Research opportunities

- Further investigation into the characteristics of students who are struggling could help determine the best ways of helping them attain the knowledge and skills required to make good financial decisions.
- Further research conducted with parents and teachers to learn how to better prepare them to teach children about money, and to feel comfortable in their ability to do so, would be beneficial.

5.0 More effective financial literacy

Financial education in Canada will benefit from a systematic approach to measurement and evaluation. Working with evaluation experts to design interventions that can be assessed using appropriate methods can provide valuable insights into what works for whom. Recognizing that there was no existing subject-specific resources for evaluating financial literacy programs in Canada, stakeholders across the country have been working to build capacity in this area, to empower service providers to evaluate their programs and to share the results of their program evaluation.

For example, Prosper Canada, a national non-profit dedicated to expanding economic opportunity for Canadians living in poverty, launched an outcome evaluation tool in November 2016, in partnership with the Canadian Bankers' Association and FCAC. The tool offers a database of evidence-based outcomes and indicators and a supporting online toolkit that will enable users to evaluate their programs.

The Financial Literacy Leader of Canada co-chairs a working group on Core Competencies on Financial Literacy led by the OECD/INFE. This working group recently developed a Core Competencies Framework on Financial Literacy for Adults as well as a Framework on Financial Literacy for Youth. These frameworks offer a flexible, outcome-based approach that can be used to inform program design and evaluation.

Most recently, FCAC hosted a Workshop on Evaluation as part of the 2017 National Conference on Financial Literacy. The workshop offered a hands-on, interactive learning experience for participants, providing new ideas and tips for conducting evaluations of financial literacy programs.

Sharing evaluation results encourages program improvements, but also learning from a broader perspective, and this is really valuable. It is important for us to learn about what works best, in which context and for whom.

6.0 A forward vision

6.1 Broadening financial literacy to financial well-being

There is a growing movement towards the measurement of financial well-being as an indicator of success for financial literacy programs and interventions. In Canada, we can measure financial knowledge, skills and confidence through the CFCS, however, financial well-being has never been explicitly defined, nor is there a standard way to measure it. In recent years, work has been undertaken internationally to define financial well-being and develop a standardized measurement tool.

For instance, the Consumer Financial Protection Bureau (CFPB) in the U.S. offers a conceptual framework for defining and measuring success in financial education by delivering a proposed definition of financial well-being, and insight into the factors that contribute to it. The CFPB defines financial well-being "as a state of being wherein you have control over day-to-day, month-to-month finances; have the capacity to absorb a financial shock; are on track to meet your financial goals; and have the financial freedom to make the choices that allow you to enjoy life."

The components of the model include: financial behaviours, financial knowledge, and personal traits (e.g., perseverance, internal frame of reference, executive functioning and financial self-efficacy). The CFPB has also developed a reliable and validated scale to measure individual financial well-being, and has fielded the scale in a national survey to measure financial well-being in the U.S. and study the factors that relate to it. A public use dataset from the survey is also available.

As another example, Dr. Elaine Kempson[5] and her colleagues at the Oslo and Akershus University College of Applied Science developed a conceptual model and preliminary analysis of financial well-being in 2016. Components of this conceptual model include financial behaviours, financial knowledge and psychological factors such as self-control, as well as income and demographic characteristics. Using data collected from a cross-sectional survey administered via an internet panel in Norway, Dr. Kempson and her colleagues found that the main drivers of financial well-being are financial behaviours such as saving regularly for the future, the ability to restrain spending, and not borrowing for daily expenses, as well as personality traits. In addition, the researchers found that financial knowledge, experience and time-orientation are correlated to financial behaviours.

[5] Elaine Kempson is Director of the Personal Finance Research Centre (PFRC) and Emeritus Professor of Personal Finance and Social Policy Research at the University of Bristol.

> *"Promoting higher levels of financial well-being is the implicit goal of all financial literacy programs. By investigating the key direct and indirect determinants of financial well-being we can pinpoint the areas where interventions are most needed and the gains are likely to be greatest, and design programs that are appropriate to the needs."* – **Dr. Elaine Kempson, University of Bristol**

FCAC is currently collaborating with Dr. Kempson and her research team to replicate this survey in Canada. In doing so, a Canadian-adapted survey will be administered online in early 2018. From this data, FCAC will explore determinants of financial well-being related to meeting commitments, feeling comfortable, resilience for the future and overall well-being. FCAC also plans to investigate predictors of financial behaviours such as budgeting, ability to restrain spending, saving regularly for the future, not borrowing for daily expenses, keeping track of money and having an informed product choice.

The Chartered Professional Accountants (CPA) Canada and the Financial Planning Foundation are also working together to develop a financial well-being self-assessment tool. The tool is planned for release in early 2018.

> *"Financial wellness isn't one size fits all–being financially well means something different to each of us. Therefore, developing tools to help Canadians better understand and articulate their own financial wellness, is an important step towards improvement in all aspects of their financial lives."* – **Derek Dedman, Financial Planning Foundation**

Other research exploring the dimensions of financial well-being include a study by Dr. Matthew Brzozowski and Dr. Brenda Spotton Visano from York University. They explored the relationship between financial stress, financial satisfaction and overall life satisfaction using data from Canada's General Social Survey (GSS) for the 2005 and 2010 cycles.

The findings show that financial stress and financial dissatisfaction are closely related. Specifically, individuals who identify financial stress as their primary stressor are less likely to report high life satisfaction. Further research will contribute to exploring the relationship of subjective financial stress with indicators of objective financial stress such as debt loads and financial behaviour.

Contribute
FCAC is seeking researchers and funders for upcoming financial literacy projects. If you would like to contribute to Canada's National Research Plan on Financial Literacy, please contact FCAC at FCAC.ResearchandPolicy-RechercheetPolitique.ACFC@fcac-acfc.gc.ca.

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